resist the opportunity to suggest that most of Mr. Morgan's observations apply also to trainees in E.N.T. surgery.

I suspect that Mr. Morgan well knows why aspirant consultants need to take the primary: (1) Difficult examinations are self-perpetuating. Those seniors who have acquired such distinctions are determined that their successors shall suffer similar ordeals. (2) Distinguished institutions have vested interests in examinations and entry fees.

The absurdity and the tragedy of the situation are manifest in the waste of time and effort demanded of trainees in learning anatomical details, which will be of no more use to them when they have patients under their care than would the knowledge demanded of a taxi-driver. The solution would be to demand that every senior student should declare his interests, and then make him pass an examination of very high standards in that specialty—whether called a fellowship, membership, or diploma matters not at all.

Perhaps those who wish to train for general practice should also be relieved of the senseless burden of memorizing for a few weeks the detailed anatomy of parts which they will never explore. Instead of this they could learn, and be examined in, such techniques as everting the upper lid, distinguishing between a turbinate and a polyp, recognizing otitis media and otitis externa, and even diagnosing sinus infection, migraine, Ménière's disease, and glaucoma.—I am, etc.,

NORMAN A. PUNT.

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Addition to Boyle's Apparatus

SIR,—A number of items of anaesthetic equipment compete for the space upon the top of the Boyle's anaesthetic apparatus. Blood-pressure recorders and other monitoring equipment is better placed at eye level than on the top of the Boyle's machine.

The theatre technician at the Royal Sussex County Hospital, Mr. Vernon Omerod, has made a small shelf that fits into the supporting pillars at the back of the Boyle's machine; this has proved to be a most useful addition to the apparatus. It is shown here carrying an assortment of items ancillary to anaesthesia, but it can also usefully support

the "sonopulse" or an oscilloscope. The bracket that holds the shelf is made by bending a length of 5/16 in. (8 mm.) metal rod to form a bracket; but other methods of support could be devised which would be equally suitable.—I am, etc.,

REX BINNING.

Royal Sussex County Hospital,
Brighton 7.

Immobilization and Rheumatoid Arthritis

SIR,—I have just seen your annotation (July 27, p. 195) and I congratulate you for saying: "The answer to this problem remains unsolved. While most clinicians agree that the actively inflamed joint must be rested absolutely, there is less agreement in the subacute case. The average patient with rheumatoid arthritis suffers over a period of many years from a large number of affected joints. . . . The therapeutic problem in each case is an intensely individual one. These patients spend most of their time at home and not in hospital or clinic, so that their family doctor has a particularly important role in caring for them."

Both of the trials you mention show that the splinted joints do better than those not splinted; the question remains how to provide this benefit to a large number of joints at once or in succession. We should remember that in both of these trials the patients were in hospital beds—the worst possible place for people with non-fatal diseases of muscle and joints. The bones and muscles waste away at a tremendous rate. I have never seen any sensible reason for the worldwide custom of putting rheumatoid patients to bed for six weeks. It takes the patient away from his job, destroys his interest in life, and makes him worry about his future. I have not put a rheumatoid patient to bed "merely for a rest" for 10 years.

You rightly call attention to the years of existence the patient has to put up with after the first period in hospital or a clinic; this is solely a problem for the family doctor. So the family doctor should be instructed on how to prevent crippling and to suppress arthritis by splinting of individual joints.

For many years I have been trying to develop methods of splinting which leave the unaffected joints free and let the patient get up and keep at his job. A different method has to be applied for each joint; but every joint in the body can be helped by continuous or intermittent splinting.¹—I am, etc.,

MICHAEL KELLY.

East Melbourne,
Australia.

REFERENCE

- ¹ Kelly, M., *Prevention and Treatment of Polyarthritides by Continuous and Active Immobilization of Joints*, 1959. Geigy, Basle.

Effect of Anabolic Steroids on Rats

SIR,—May I draw the attention of your readers to investigations showing that androgenic hormones¹ and certain anabolic steroids² produce permanent sterility in female rats when given during the neonatal period? The ovaries of mature rats that at the age of 5 days had been given a single injection of testosterone or 19-nor-testosterone contained follicles and interstitial cells, but ovulation and the development of corpora lutea failed to occur. Ovarian weight was considerably reduced. Mating behaviour has been described as abnormal. Another two anabolic steroids, 1-methyl- Δ^1 -androstenolone-oenanthate and methandrostenolone, studied in rats appeared also to influence reproductive organs unfavourably when given during the early neonatal period. The data available so far are incomplete, notably with regard to dose-response relationships of anabolic steroids and the number of species studied. None the less, it would seem wise to avoid the use of anabolic steroids in small and prematurely born children until more is known about possible delayed effects of these agents.—I am, etc.,

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University of Lund, Sweden.

REFERENCES

- ¹ Takewaki, K., *Experientia (Basel)*, 1962, **18**, 1.
- ² Jacobson, D., *Acta endocr. (Kbh.)*, in press.

Osteomyelitis of the Ribs

SIR,—It was with great interest that I read Mr. A. J. M. Mathieson's case of blood-bone pyogenic osteomyelitis of the ribs (September 14, p. 668), since we have a similar case in our ward. We have bacteriological proof and are awaiting the pathognomonic radiological changes of the disease. May I quote the following case history:

A boy aged 13½ years was admitted with a 24-hour history of a gnawing left loin pain which was of sudden onset and severe

enough to keep him awake at night. He had some frequency of micturition but no dysuria, and his pain was aggravated by coughing and deep breathing.

On examination his temperature was 101.8° F. (38.8° C.), pulse 96, respiration 20. The W.B.C. count was 11,200 (90% neutrophils). The E.S.R. was 22 mm. in the first hour. The urine was acid in reaction and contained neither protein nor pus cells and yielded no significant bacterial growth on culture. A nose swab grew *Staph. pyogenes*. An x-ray of chest and left ribs showed no abnormality. A blood culture also grew *Staph. pyogenes*. The only abnormal physical signs were tenderness in the left loin, renal angle, and over the left lower ribs, posteriorly with obvious swelling in the same regions.

The temperature remained around 104° F. (40° C.) for 24 hours, returning to normal by the fourth day. The differential diagnosis was considered to be perinephric abscess, ruptured spleen, or osteomyelitis of the ribs.

Treatment with oral tetracycline 250 mg. six-hourly was started on admission. On the fourth day a needle was introduced into the ill-defined swelling and a few beads of blood-stained pus were withdrawn from near the 10th rib. A presumptive diagnosis of osteomyelitis of the rib was made, and the patient's antibiotic was changed to intramuscular soluble penicillin, 1 mega unit b.d. A swab of the pus was sent for culture and yielded a heavy growth of *Staph. pyogenes*, confirming the diagnosis. On the same day the E.S.R. was 11 mm./first hour, and W.B.C. 6,800, a substantial improvement which was in keeping with his clinical progress.

The *Staph. pyogenes* isolated from the nose swab, blood culture, and swab from the rib was sensitive to tetracycline and penicillin. In view of the long-term antibiotic therapy required for osteomyelitis intramuscular penicillin was considered the preferable choice.

This boy had suffered from a boil on the back of his neck for three weeks prior to the onset of his pain, for which he had no treatment. He was very fond of wrestling, and thought he probably received a blow on the left ribs. I assume that local trauma to his rib made it a suitable nidus for the blood-borne *Staph. pyogenes*.

—I am, etc.,

R. J. CUNNINGHAM.

Royal Free Hospital,
London W.C.1.

Maternal Deaths from Aspiration Asphyxia

SIR,—Dr. P. Dransfield (September 28, p. 809) has written an admirable statement on general anaesthetics in obstetrics with which few would disagree. The lateral position, however, is not the only solution to the problem. In his letter to the *Journal* (August 17, p. 446) Dr. A. H. Morley implied that regional analgesia was used as the exception.

May I suggest that we ask ourselves, "Is a general anaesthetic really necessary?" In the Derby City Hospital, which admits all the obstetric emergencies from this area, only 5% of the forceps deliveries are performed under general anaesthesia. I feel sure that the use of pudendal block has great advantages. A very great deal of pre- and post-anaesthetic treatment is avoided with benefit to the mother and often to the child.

Needless to say, the problem of aspiration asphyxia does not arise.—I am, etc.,

ROBERT JAMIESON.

Derby.

Diagnosis of Coarctation

SIR,—Coarctation of the aorta is rare, but its clinical diagnosis can be so simple, and prognosis in the late-diagnosed case is so unfavourable, that it would seem worth while feeling the femoral pulse at routine school medical inspections.

Of four cases known to me, in only one was the diagnosis made as the result of the first routine medical examination at the age of 5 years. The second case was a boy of 18 years who had had three routine medical examinations and who died of cerebral haemorrhage associated with coarctation, the latter being diagnosed in hospital one month before death, with confirmation at necropsy. The third case is a boy who had many medical examinations because of his symptoms, which were those usually associated with high blood-pressure. Fortunately, he developed appendicitis, and the coarctation was discovered while he was in hospital. The fourth case was asymptomatic when spotted at his second routine medical.

The time to diagnose and treat coarctation is, surely, in the first ten years of life. After all, it takes less than ten seconds to feel the femorals.—I am, etc.,

R. A. STRANG.

Wembley, Middlesex.

Acute Appendicitis in Childhood

SIR,—Dr. R. H. Jackson's article (August 3, p. 277) re-emphasizes the diagnostic difficulties and frequent complications of pelvic appendicitis. Even longer delays than he mentions can arise when gastro-enteritis is diagnosed and the child is admitted to an infectious diseases unit.¹ The larger isolation hospitals regularly see children in this predicament, and during a three-year period, largely in the Manchester area, one has encountered a dozen such misdiagnosed cases. Three, transferred from general hospitals, are particularly worthy of recall to illustrate the consequent clinical difficulties—and embarrassments:

(1) Girl, aged 2 years.—Onset with vomiting and central abdominal pain; diarrhoea after 36 hours; transferred from paediatric unit as gastro-enteritis. Examination showed slight guarding over her tender lower abdomen and exquisite rectal tenderness; bowel sounds scanty. After retransfer, ruptured pelvic appendicitis was confirmed at laparotomy.

(2) Boy, aged 11 years.—Sent to paediatric unit by family doctor as acute appendicitis giving 36 hours' history of vomiting, initially with central abdominal colic, later with diarrhoea and lower abdominal pain. The surgical and medical housemen agreed in diagnosing "acute dysentery"; the consultant paediatrician later concurred and transfer for isolation was uneventfully arranged. Next day a high leucocytosis was reported, and this initiated a full reappraisal which revealed lower abdominal guarding and a tender pelvic mass. His appendix abscess subsided after retransfer, and he had an interval appendicectomy later.

(3) Boy, aged 3 years.—Sent to casualty department with six days' diarrhoea and fever. Paediatric registrar diagnosed gastro-enteritis and referred him for isolation. Later re-examination of an unexpectedly ill child showed a tender suprapubic mass, more readily palpable rectally. A surgical consultation confirmed the diagnosis of appendix abscess, which settled with conservative treatment. The parents eventually recalled central abdominal colic, awakening him from sleep, as the initial symptom; the diarrhoea had begun on the second day.

This spurious diarrhoea is certainly misleading but hardly uncommon,² for one appendicitis in four is pelvic, and half such cases have diarrhoea—e.g., it occurred in 19 of the 31 reported by Hindmarsh.³ In the differential diagnosis, abdominal pain is the decisive symptom, being unimpressive in bowel infections; vomiting, too, is surprisingly infrequent in gastro-enteritis after infancy, except in food-poisoning, when diarrhoea rapidly becomes the predominant complaint. And any degree of sustained lower abdominal or rectal tenderness, with resistance to palpation, must suggest appendicitis with irritation of the pelvic peritoneum—even before frank rupture with peritonitis and abscess formation.

Classically the lax, rumbling, non-tender abdomen of infective enteritis contrasts strongly with the tense, tender, silent lower abdomen of ruptured pelvic appendicitis. But an earlier arousal of suspicions will come from a vigilant analysis of the history—particularly when diarrhoea has been delayed until the second or later days of an illness which began with vomiting or abdominal pain.—I am, etc.,

J. P. ANDERSON.

Taunton Isolation and
Chest Hospital,
Taunton, Somerset.

REFERENCES

- ¹ Bunton, G. L., *Brit. med. J.*, 1953, 2, 71.
- ² *Ibid.*, 1953, 2, 1148.
- ³ Hindmarsh, F. D., *ibid.*, 1954, 2, 388.

Infant Feeding During Ramadhan

SIR,—In a study of infant-mother interaction among the Ganda¹ it was observed that babies of Muslim mothers showed signs of underfeeding at the breast during the Ramadhan fast. Those mothers were not malnourished and by tropical standards their food intake was not unusually low or unbalanced even during the fast. Was this an infant-mother anxiety syndrome related to a change in meal-time routine? Was it perhaps a result of dehydration?

We wonder whether these findings are common in Muslim countries. We also wonder whether in any Muslim community dispensation is allowed to lactating mothers—particularly with regard to their fluid intake during the fast.—We are, etc.,

MARY D. AINSWORTH.
HEBE F. WELBOURN.

London N.W.3.

REFERENCE

- ¹ Ainsworth, M. D., in *Determinants of Infant Behavior*, 1961, Vol. 2. Edited by B. Foss, Methuen, London.